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# Innovative Interprofessional Pediatric Dentistry Curriculum & Infant Oral Care Program Address Disparities in Oral Health

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# Presenter Disclosures

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

**No relationships to disclose**

**UCLA** School of Nursing



David Geffen  
School of Medicine

**UCLA** School of Dentistry

Section of Pediatric  
Dentistry



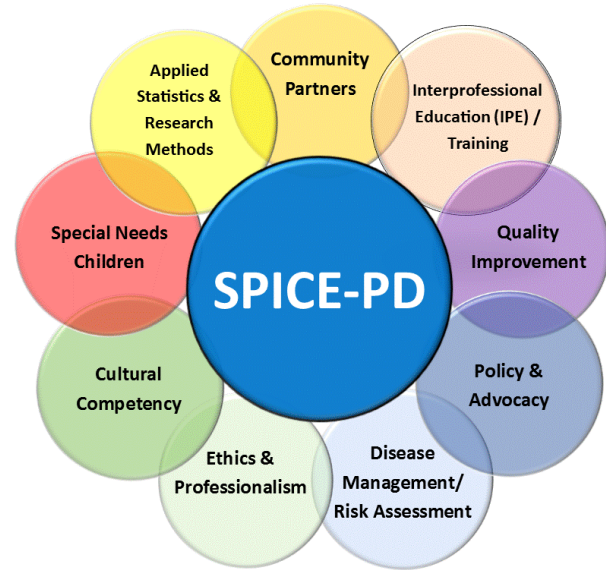
# Objectives

- What is SPICE-PD?
- Describe the IPE curriculum
- Describe Infant Oral care Program (IOCP) and community collaborations
- SPICE-PD evaluation framework

# SPICE-PD: Strategic Partnership for Interprofessional Collaborative Education in Pediatric Dentistry

- Establish an Integrated Oral and Primary Healthcare Clinical Training Program
- Prepare postdoctoral pediatric dentists to provide care for **underserved and special needs** groups and communities
- Enhance training in dental public health

<http://www.uclachatpd.org>



**HRSA**  
Health Resources & Services Administration

# Understanding Children's oral health policy and advocacy

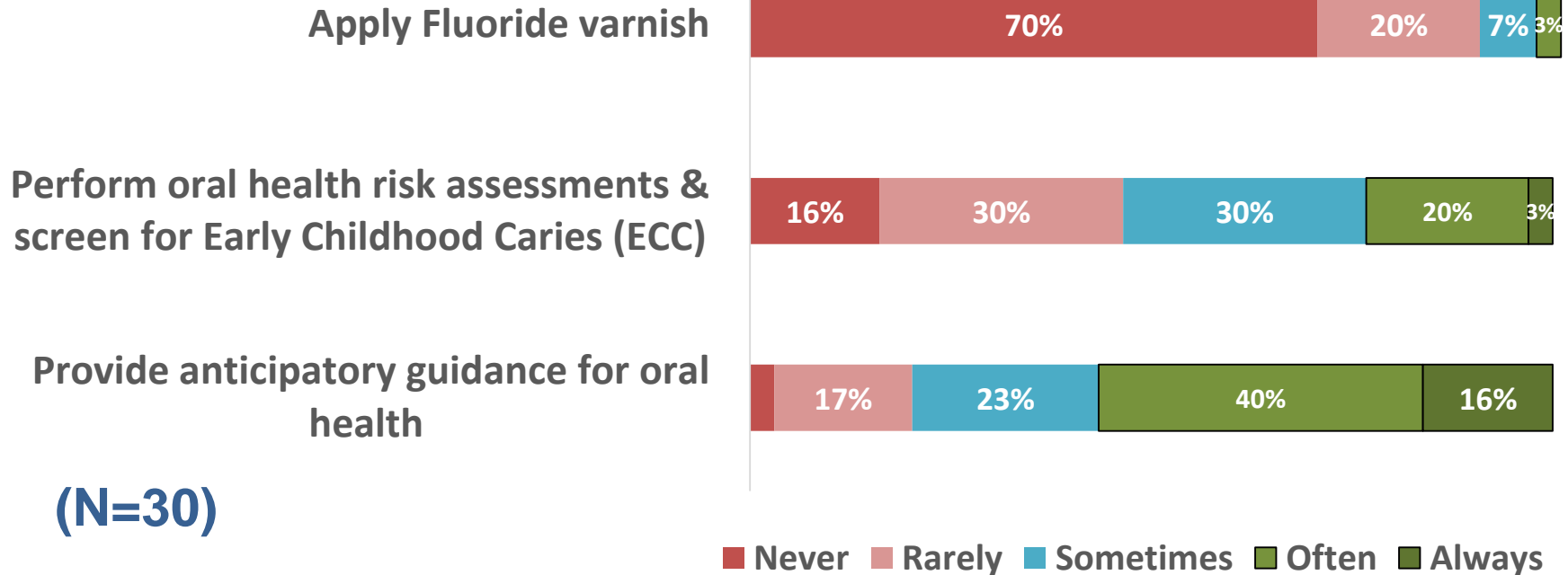


# Scope of the Problem

- **ECC – Most common chronic disease of childhood (60-90% worldwide 1,2,3)**
- **Medicine/Nursing & Dentistry- “Silos” → usually “See a dentist”**
  - ✧ yet insufficient providers in many underserved communities
  - ✧ Not traditionally a part of medical school or pediatric med residency training.
- **USPSTF has recommended Fluoride Varnish application in Primary Care since 2014<sup>5</sup> – PCPs see children up to ten times first two years- PCPs are well positioned to ameliorate this disease burden.**



# As a health care professional (MDs & RNs), how often do you ...



# 3 Part IPE Curriculum

A: Smiles for Life Modules /App<sup>(6)</sup> & selected readings

B: Oral health lecture & fluoride varnish lab

C: Clinical IPE experience at Infant Oral Care Program (IOCP)

- ◆ **Needed** – Oral Assessment missing in most programs
  - HEENT → INCLUDE “oral”: **HEENOT** (Haber et al., 2015<sup>4</sup>)
  - Core clinical competencies for PCPs
  - Lack awareness of oral care
- ◆ **Lifespan Approach** – What to assess + interventions
  - HRSA grant focus: prenatal + child to 5 yrs old





# 3 Part IPE Curriculum

**A: Smiles for Life App & selected readings**

**B: Oral health lecture & fluoride varnish lab**

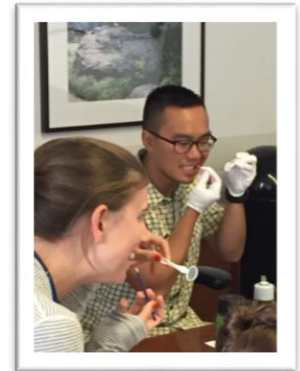
**C: Clinical IPE experience at IOCP**

## ◆ **Caries Risk Assessment Tools (CRA)**

- ✓ **CAMBRA** <sup>7</sup> (Dr. Ramos-Gomez) – Lecture by Pediatric Dentist
- ✓ **American Academy of Pediatrics - Oral Health Assessment Tool** <sup>8</sup>
- ✓ Reviewing videos/cases studies

## ◆ **Fluoride varnish Lab - with RDH**

- ✓ Comfort with equipment



# Training A & B



# White Spot Lesions





# 3 Part IPE Curriculum

A: Smiles for Life App & selected readings

B: Oral health lecture & fluoride varnish lab

C: Clinical IPE experience at Infant Oral Care program



- ◆ **IPE with Pediatric Dentistry – A first**

- ✓ Infant Oral Care Clinic – true IPE

- ◆ **Clinical Practicums**

- ✓ Training scheduling issues- align schedules of MDs, RNs, pediatric & general dental residents (AEGDs/GPRs)

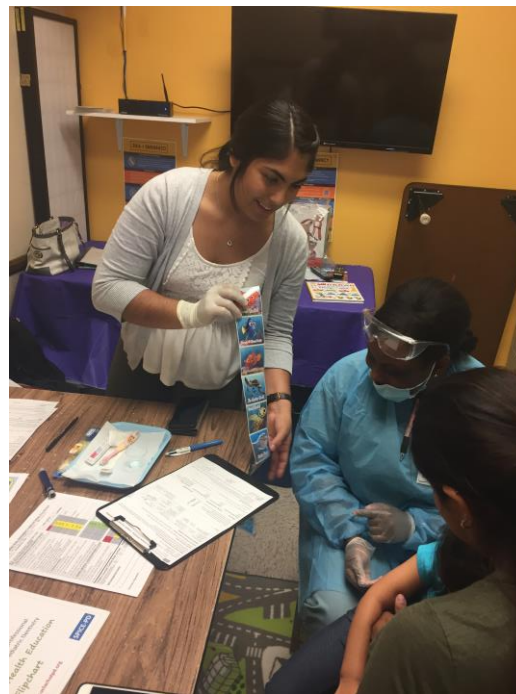
# Infant Oral Care Program (IOCP)

[www.uclaiocp.org](http://www.uclaiocp.org)

- Interprofessional training site- emphasizing prevention.
- Med/Dental integrated community clinics but also non-traditional sites such as WIC, preschools, and Head Start.
- Majority of patients: low SES, underserved & families of color.

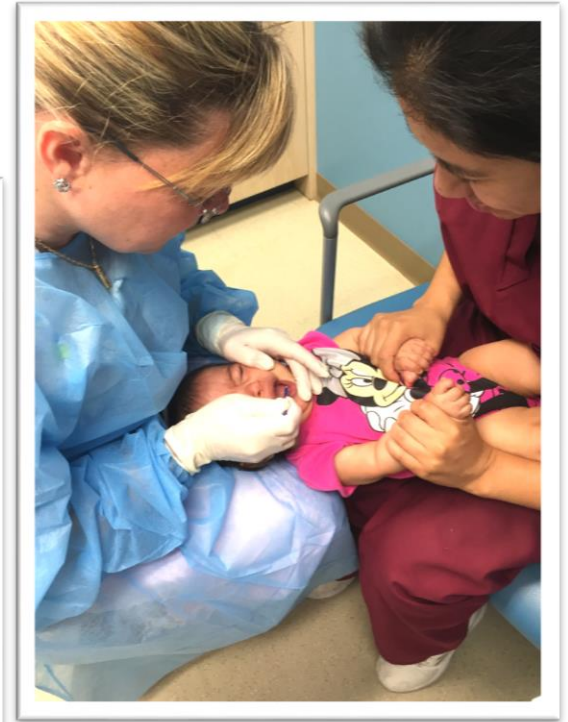
Over 978 children seen at IOCP (2010-now)- 254 cases maintained with no decay, 40 cases maintained at WSL, and 48 cases averted.

# Working with community partners: rotations at WIC, Head Start, and Mobile Van- understanding the social determinants of health



# PNPs with Pediatric Dentist colleagues at IOCP

- Value IPE experience: additional learning
- Champion oral health in Primary Care





# PNPs (RNs) Student Feedback

## Immediately incorporate new evidence into practice

- ◆ **First lecture by a Dentist** – value IPE
- ◆ **First time students learned of “white spots”** – or knew to look
- ◆ **Misconceptions/outdated information about oral preventive health practices**
  - ✓ Not aware of 2014 ADA, AAPD, AAP<sup>8</sup> changes and recommendations
- ◆ **Work in Hospitals & other community clinics** (Current PT work environment for many students)
  - ✓ Notice poor quality toothbrushes and lack of oral care
  - ✓ began examining teeth and finding problems, educating caregivers about oral health practices (sippy cups; bottles; juice/snack consumption, etc.)
- ◆ **Clinical PNP Experience Barriers:**
  - ✓ No/Few Primary Care sites supply/apply fluoride varnish

# Implications – Care Delivery

Despite USPSTF <sup>5</sup> recommendation and state reimbursement, **few primary care practices incorporate fluoride varnish application.**

- ❑ Need to increase skills for existing & train more PCPs
  - ✓ Caries Risk Assessment
  - ✓ Fluoride varnish
  - ✓ Preventive practices
- ❑ Expand training to PHN nurses (home visiting) – Low income groups
- ❑ Expand training to medical students, other medical residents (Family Physicians) & Advance Practice Registered Nurses (APRNs)

# SPICE PD Evaluation



Program  
Development




Knowledge &  
Skills gained



Professional  
Choices

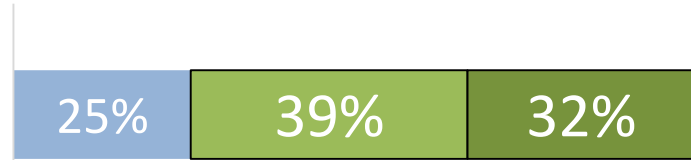


# Evaluation data collection methods

<b>Year-end survey</b>	<b>Alumni Survey</b>
<b>Alumni Interviews</b>	<b>Enrollment records (MedHub residency mgmt.)</b> 
<b>Board Exam Results</b>	<b>Clinical Data (EDR/EHR Quality Improvement)</b>

# Agreement of MDs, PNP, & general dental residents (AEGDs/GPRs) with the following statements:

**SPICE-PD program has prepared me well to address the oral health needs of special needs & vulnerable populations**



**SPICE-PD faculty provided important perspectives on oral health that I did not receive elsewhere in my graduate education**



**My experience in SPICE-PD has positively influenced my professional practice as regards oral health.**



■ Neutral ■ Agree ■ Strongly Agree

**(N=92)**

# Agreement of MDs & PNPs with the following statements: SPICE-PD has...

Primary care professionals should incorporate oral health in routine patient care.

100%

improved my skills to screen for Early Childhood Caries

100%

improved my skills to apply Fluoride varnish

90%

increased my sense of responsibility to apply Fluoride varnish

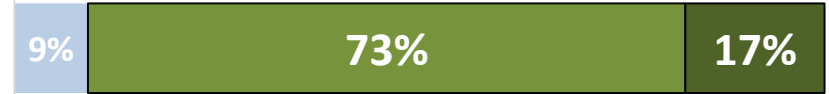
90%

(N=30)

Agreed or Strongly Agreed

# Agreement of general dental residents (AEGDs/GPRs) with the following statements: SPICE-PD has...

has increased my appreciation of the importance of providing preventive oral health education to parents



has increased my intention to perform a written caries risk assessment



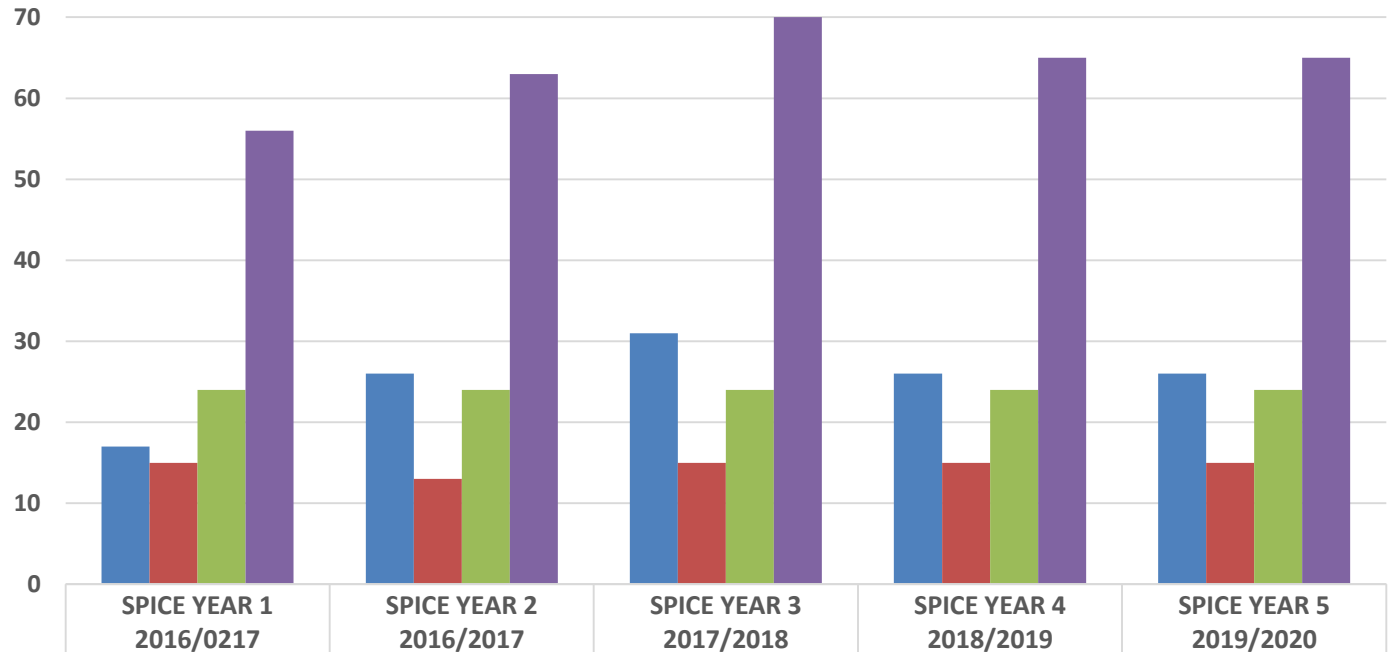
has increased my comfort with seeing infants & toddlers in my practice



(N=41)

■ Neutral ■ Agree ■ Strongly Agree

# SPICE-PD # of Participants 2015-2020: 319 (est.)



<span style="color: blue;">■</span> Pediatric medical residents	17	26	31	26	26
<span style="color: red;">■</span> PNP	15	13	15	15	15
<span style="color: green;">■</span> AEGDs/ GPRs	24	24	24	24	24
<span style="color: purple;">■</span> Total (*est.)	56	63	70	65	65



# Conclusions:

1. Broad dissemination of interprofessional training in preventive oral health may help decrease the overall burden of childhood caries
2. An oral health curriculum that capitalizes on opportunities in interprofessional collaboration can improve confidence and practice in the prevention and management of childhood caries.
3. Medical/dental integrated community settings especially in underserved communities is the future for childhood caries prevention.



# Acknowledgements

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## For more information:

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**SPICE-PD website** <http://www.uclachatpd.org>

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